

Work Order ID 106094

August-28-13 12:42:02 PM

106094

Page 1

Item ID: 646.3313

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Upper Guide

Start Date: 8/28/13 Start Qty: 5.00

*5*6

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: MLC

Date: 13-08-29

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
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646.3300	N/C								
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100 *100* BAND SAW 0.00

Bandsaw
Jeaspa Bandsaw

Memo 0.00

Cut Blank at 13.500"

*** ONE BLANK MAKES TWO PARTS***

110 *110* HAAS CNC VERTICAL MACHINING #1 0.00

HAAS I
HAAS CNC vertical machine #1

Memo 0.00

1-Machine per folio FB152
DWG REV: N/C
FOLIO REV: A4

2- deburr and break all sharp edges

OK 13/09/10

6 8

OK 13/09/11

6 8

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS															
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description			Sign & Date	Verification		QC Inspector								
Doc/Data																					
Equip/Tooling																					
Operator																					
Material																					
Setup																					
Other																					
Process																					
Supplier																					
Training																					
Unapproved																					
FAULT CATEGORY																					
Landing Gear	General																				
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>										Pressure/Forced <input type="checkbox"/>							
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>										Temperature/Cure <input type="checkbox"/>							
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>										Weld <input type="checkbox"/>							
	Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>										Wrong Stock Pulled <input type="checkbox"/>							
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>																	
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>																	
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>										Other <input type="checkbox"/>							
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>																		
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>																		
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>																		
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>																		

Work Order ID 106094

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106094

Page 2

Item ID: 646.3313

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Upper Guide

Stop *NS2*

Start Date: 8/28/13 Start Qty: 5.00 *5*

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 5.00 *5*

Customer:

Reference:

Approvals:

Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

CK 13/09/11

6 4

120

QC

Quality Control

130

QC8- Inspect parts - second check

0.00

CK 13/09/12

6 0

DAS
08
9-83

130

QC

Quality Control

131

0.00

CK 13/09/14

131

HandFinish

Hand Finishing

0.00

CLEAN AND REMOVE ALL PART MARKING

W/A

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____	Rework <input type="checkbox"/>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>						
NCR No. _____	Scrap <input type="checkbox"/>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>						
	Use-as-is <input type="checkbox"/>		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>						
	Work Order Update <input type="checkbox"/>		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>							
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector	
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other												
Process												
Supplier												
Training												
Unapproved												
FAULT CATEGORY												
Landing Gear	General											
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>							
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>							
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>							
	Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>							
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>								
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>								
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>							
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>									
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>									
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>									
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>									

Work Order ID 106094

106094

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Page 3

Item ID: 646.3313

Accept

N900040100

Setup

Start *NS1*

Revision ID:

Stop

NS2

Item Name: Upper Guide

Start Date: 8/28/13 Start Qty: 5.00 *5*

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 5.00 *5*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

140

140

Outsource4

Outsource process - Anodize

150

150

Packaging

Packaging

155

155

QC

Quality Control

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

DAS

27

9.89

139.20

28/08/16 4

13/8/20 (6)

6

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS														
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Part No. _____			Work Order Update <input type="checkbox"/>																	
NCR No. _____																				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description			Sign & Date	Verification	QC Inspector								
Doc/Data																				
Equip/Tooling																				
Operator																				
Material																				
Setup																				
Other																				
Process																				
Supplier																				
Training																				
Unapproved																				
FAULT CATEGORY																				
Landing Gear				General																
				Bending <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>													
				Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>													
				Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>													
				Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>													
				Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Part Moved <input type="checkbox"/>														
				Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>														
				Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>													
				Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>															
				Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>															
				Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>															
				Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>															

Work Order ID 106094

106094

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Page 4

Item ID: 646.3313

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Upper Guide

Stop

NS2

Start Date: 8/28/13 Start Qty: 5.00

5

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

Identify as per dwg & Stock Location: ST428A 0.00

6x

100%

13-09-20

180

Packaging

Packaging

Memo 0.00

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

190

QC21- Final Inspection - Work Order Release 0.00

13-09-23

190

QC

Quality Control

Memo 0.00

AB 09-20

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS																									
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>											
Part No. _____			Work Order Update <input type="checkbox"/>																												
NCR No. _____																															
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description			Sign & Date	Verification		QC Inspector																		
Doc/Data																															
Equip/Tooling																															
Operator																															
Material																															
Setup																															
Other																															
Process																															
Supplier																															
Training																															
Unapproved																															
FAULT CATEGORY																															
Landing Gear				General																											
				Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Countersink <input type="checkbox"/>	Cuffs <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Heat Treat <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Misread <input type="checkbox"/>	Offset <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>

Picklist Print

August-28-13 12:42:02 PM

Page 1

Work Order ID: 106094

Parent Item: 646.3313

Parent Item Name: Upper Guide

Start Date: 8/28/13

Required Date: 8/28/13

Start Qty: 5.00

Required Qty: 5.00

Comments: JPP REV:A NEW ISSUE 12/11/14 JFS VERIFY BY: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B5.000X0.375 7075-T6 BAR 5.000" X 0.375"		Purchased	No			100	f	85.5297	0.563	2.9631579			

Location	Loc Qty	Loc Code
MAT049	85.5297	
123218	27.4357	
123418	2.464	
m126390	5	
→ m126615	50.63	

3.7 13/09/10

NCR: Yes / No

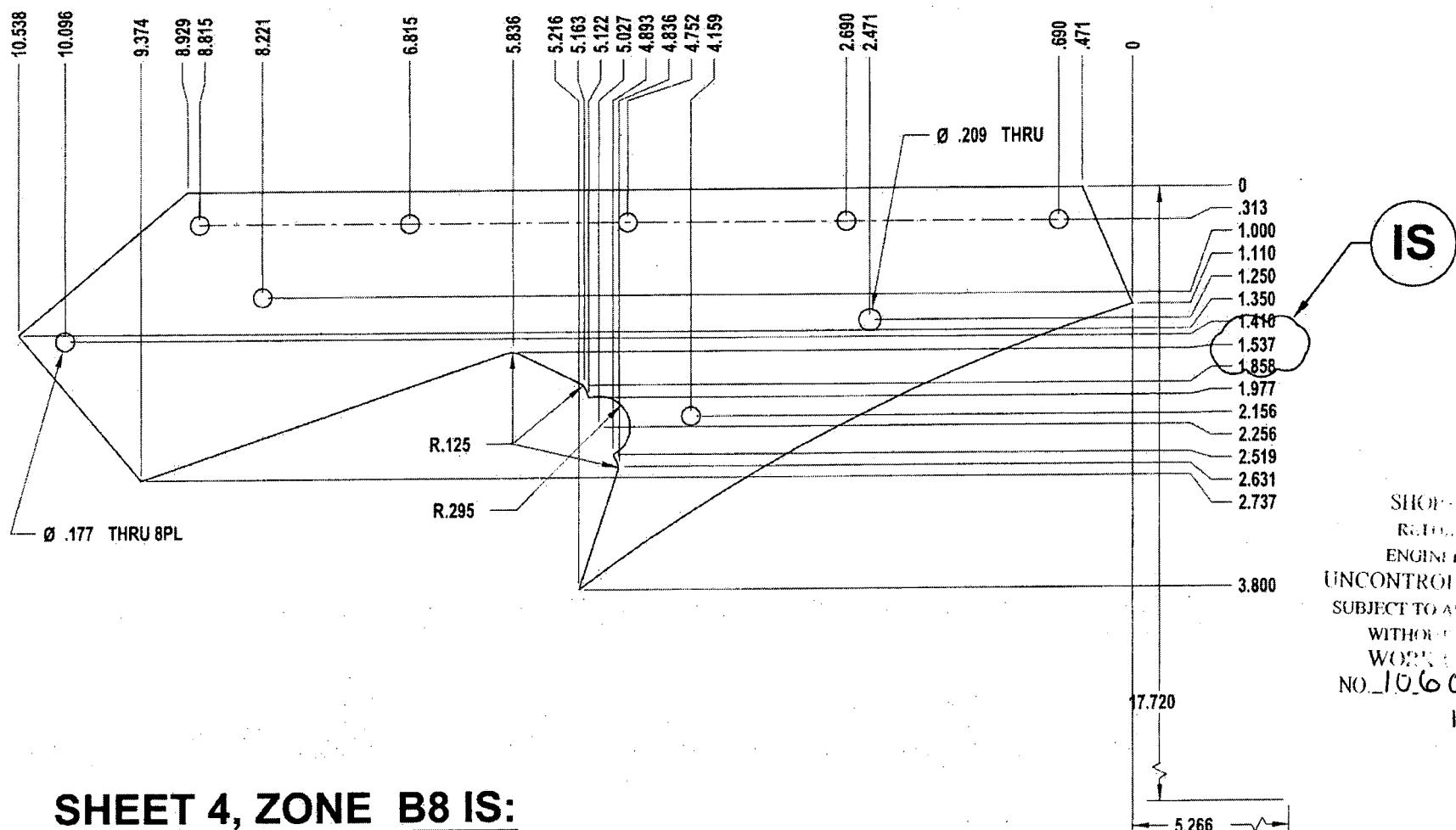
DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering				
NCR No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				Bending <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
				Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
				Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>				
				Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
				Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Part Moved <input type="checkbox"/>					
				Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
				Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>				
				Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>						
				Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>						
				Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>						
				Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>						

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1		
	DWG NO. 646.3300		REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12		EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.
	DWG TITLE: UPPER CUTTER ASSY						
	APPROVED BY:	ENGR: <i>J. Brum</i>	MFG: <i>David Bahr</i>	QC: <i>John</i>			EFF: NEXT ORDER
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025	



SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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APICAL INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.		02196	SHEET 1 OF 2
DWG NO.	646,3300	REV: N/C	PREPARED BY S. HUFF DATE: 01/05/09 EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY: ENGR *P. B. S.*

UPPER CUTTER ASSY

S. HUFF | DATE: 01/05/09

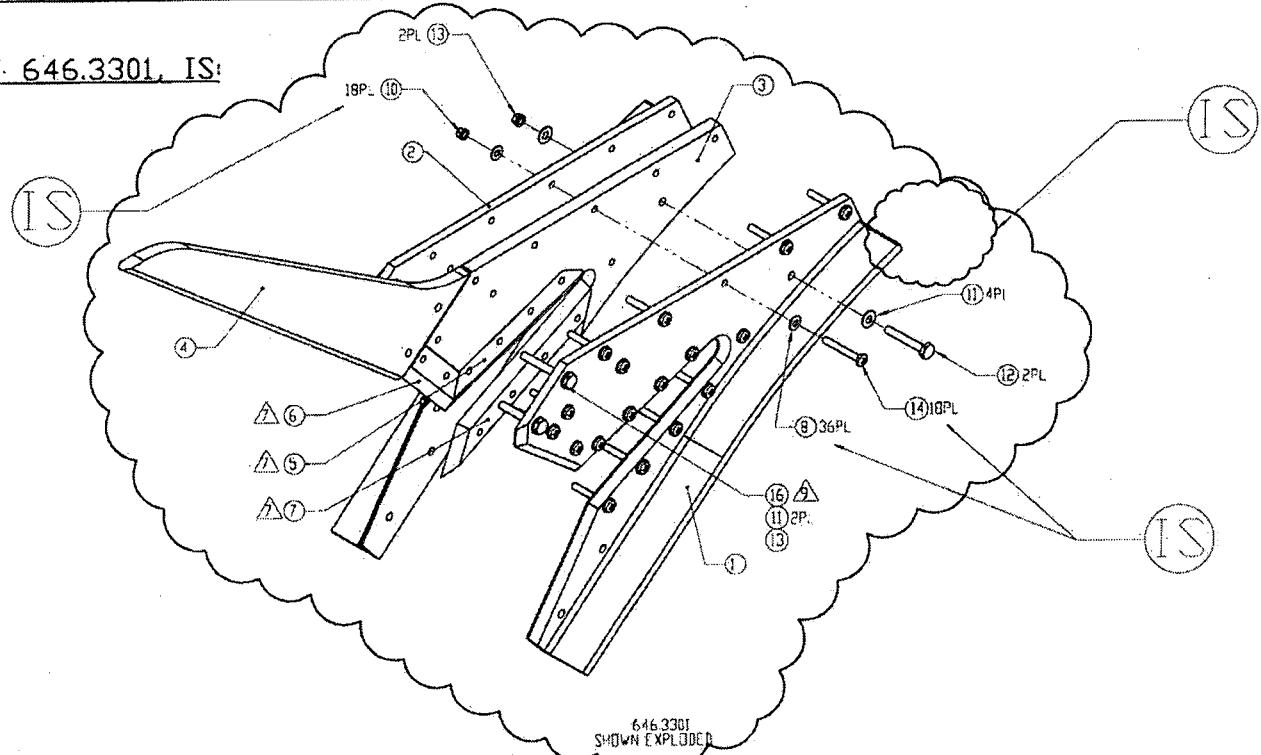
SHEET 1 OF 2

EFFECT ON DWG
□ INC. UNINC.

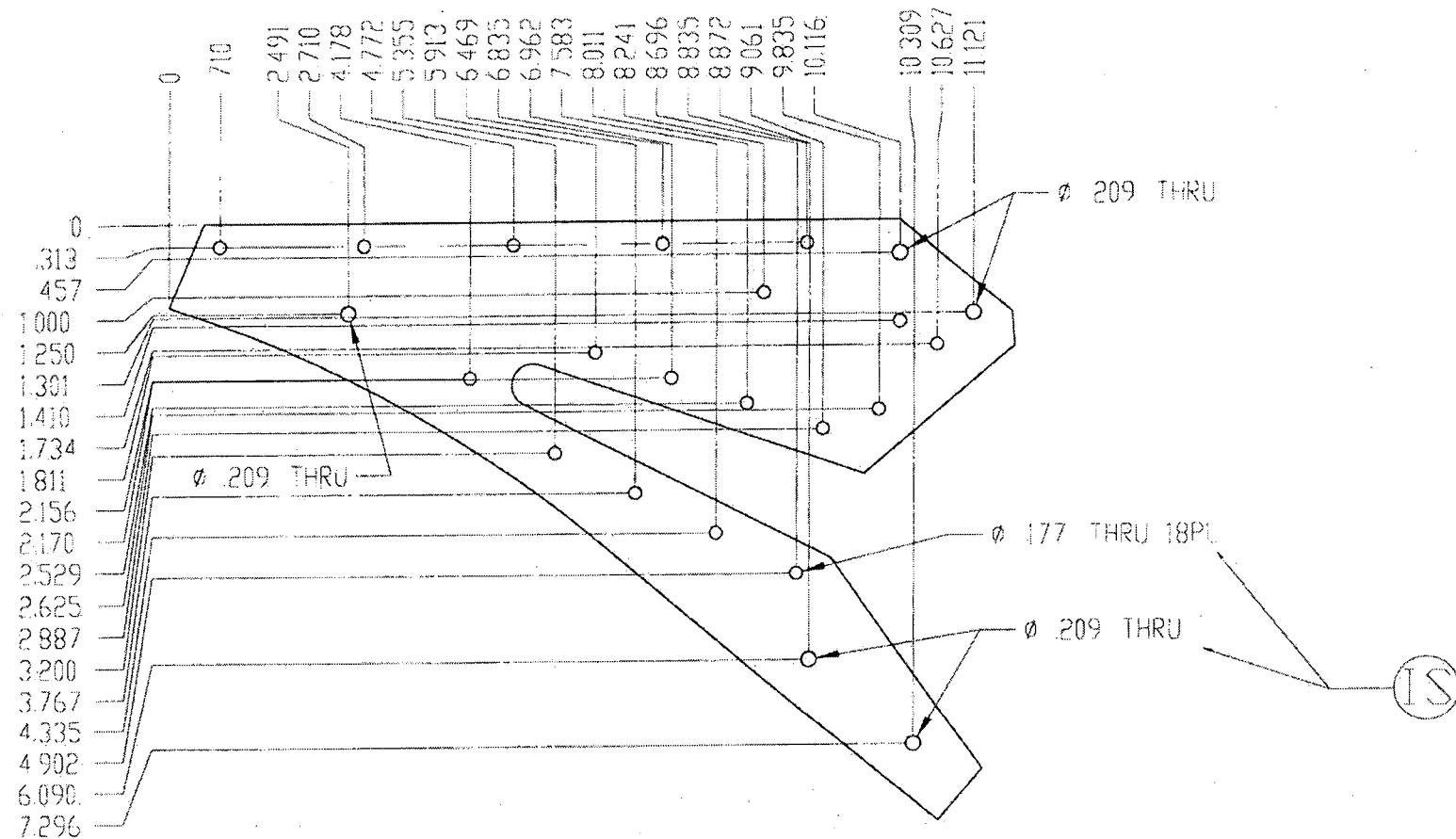
TRANSACTION CODES (TC)

REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS

SHEET 1, VIEW 646.3301, IS:



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
14	R	601.2765	18	SCREW	MS27039-0819
10	R	601.1541	18	LOCKNUT	MS21042L08
9	D	601.2766	3	RIVET	MS20470AD5-18
8	R	601.2764	36	WASHER	NAS1149FN832P
			,3301		
DOCUMENTS EFFECTED: <input type="checkbox"/> MDL <input checked="" type="checkbox"/> INSTALL INSTRUC <input checked="" type="checkbox"/> ICA <input type="checkbox"/> FMS <input checked="" type="checkbox"/> BOM					
<input type="checkbox"/> CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR					
<input type="checkbox"/> DER REVIEW REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					

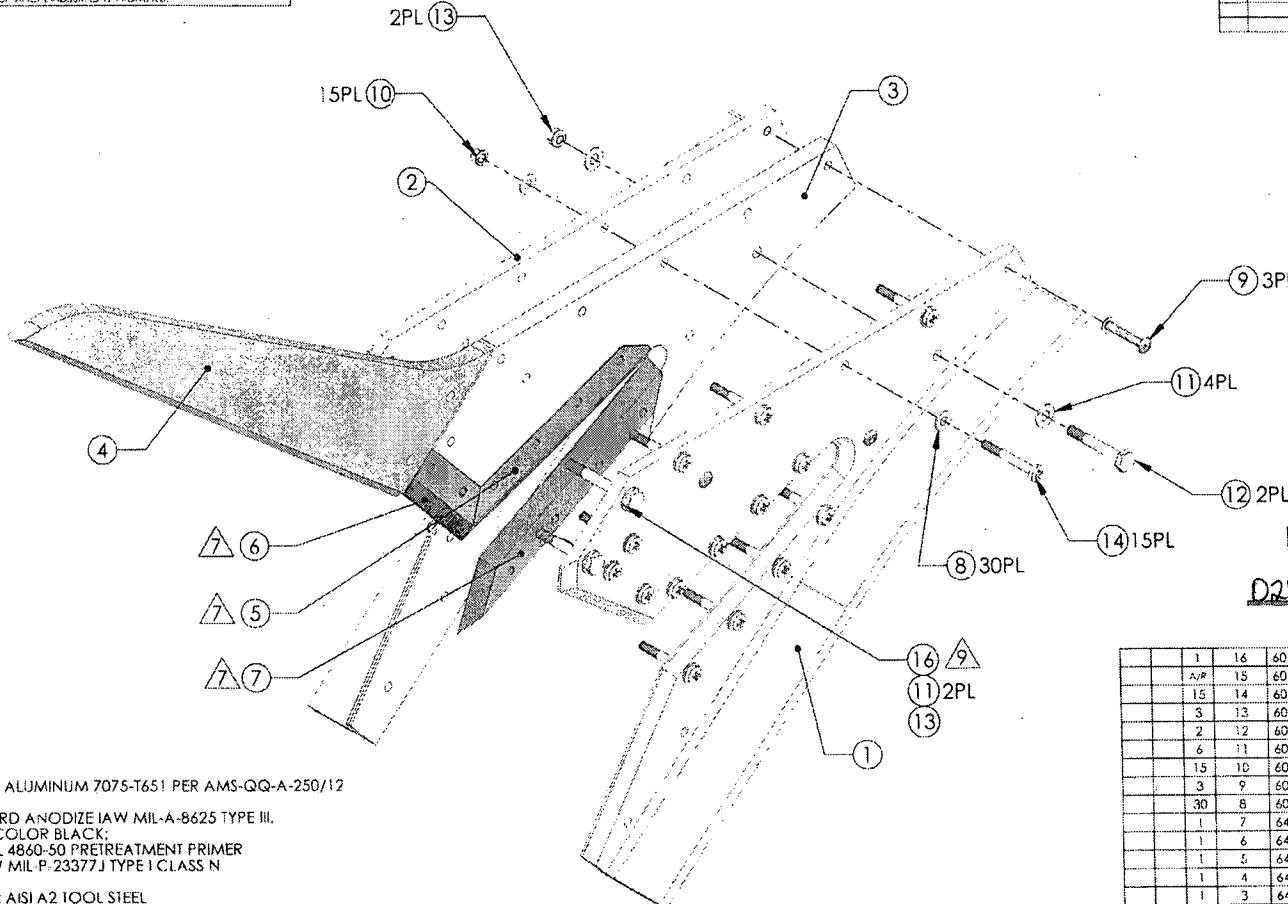
SHEET 3, SECTION VIEW A-A, IS

SECTION A-A [P-6]

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

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REVISIONS		DATE	APPROVED
REV	DESCRIPTION		



UNINCORPORATED ECN(s)

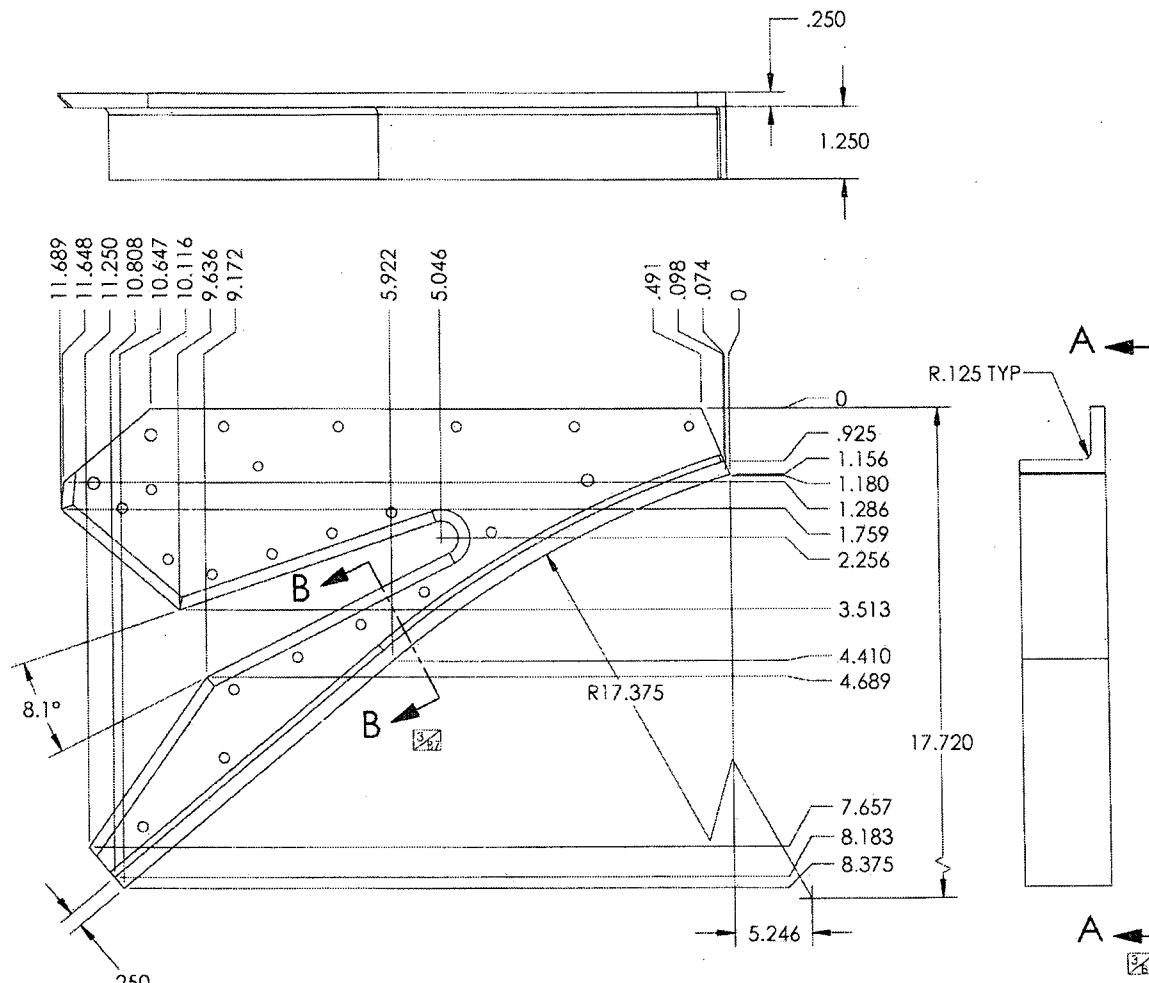
02196, 0372

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III.
CLASS 2, COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-2337J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-2337J TYPE I CLASS N
- 5 DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
- 6 IDENTIFY IAW MPP-120
- 7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE.
- 9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLoded

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646.3310 SHOWN
646.3311 OPPOSITE

106094

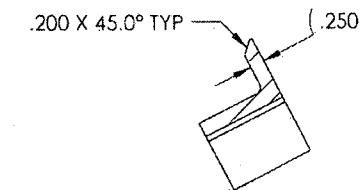
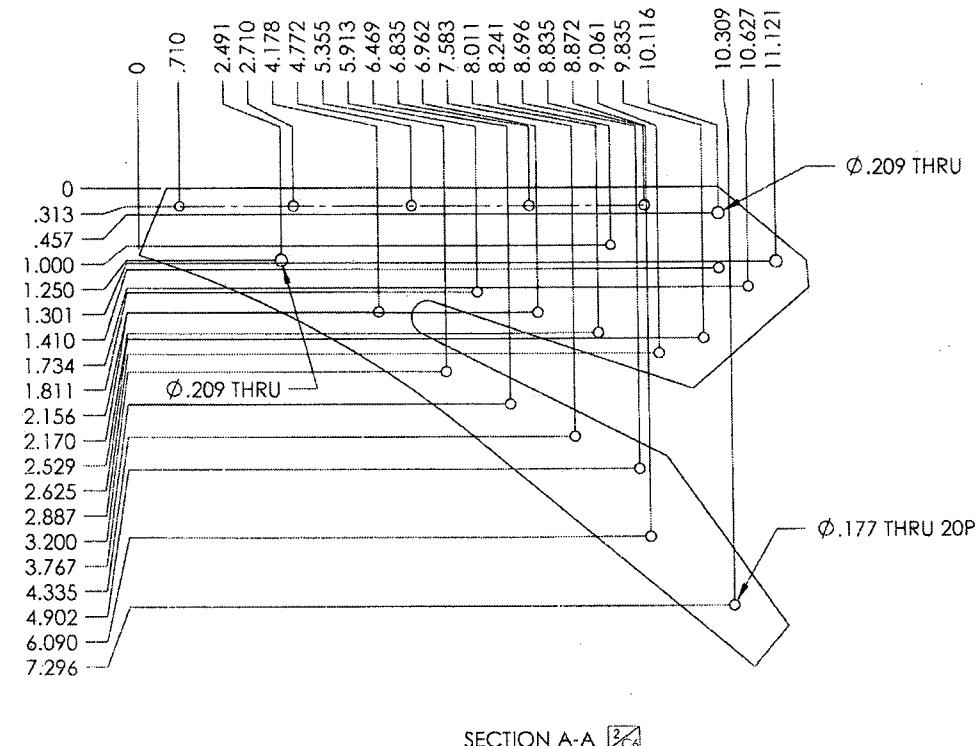
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

A

B

C

D



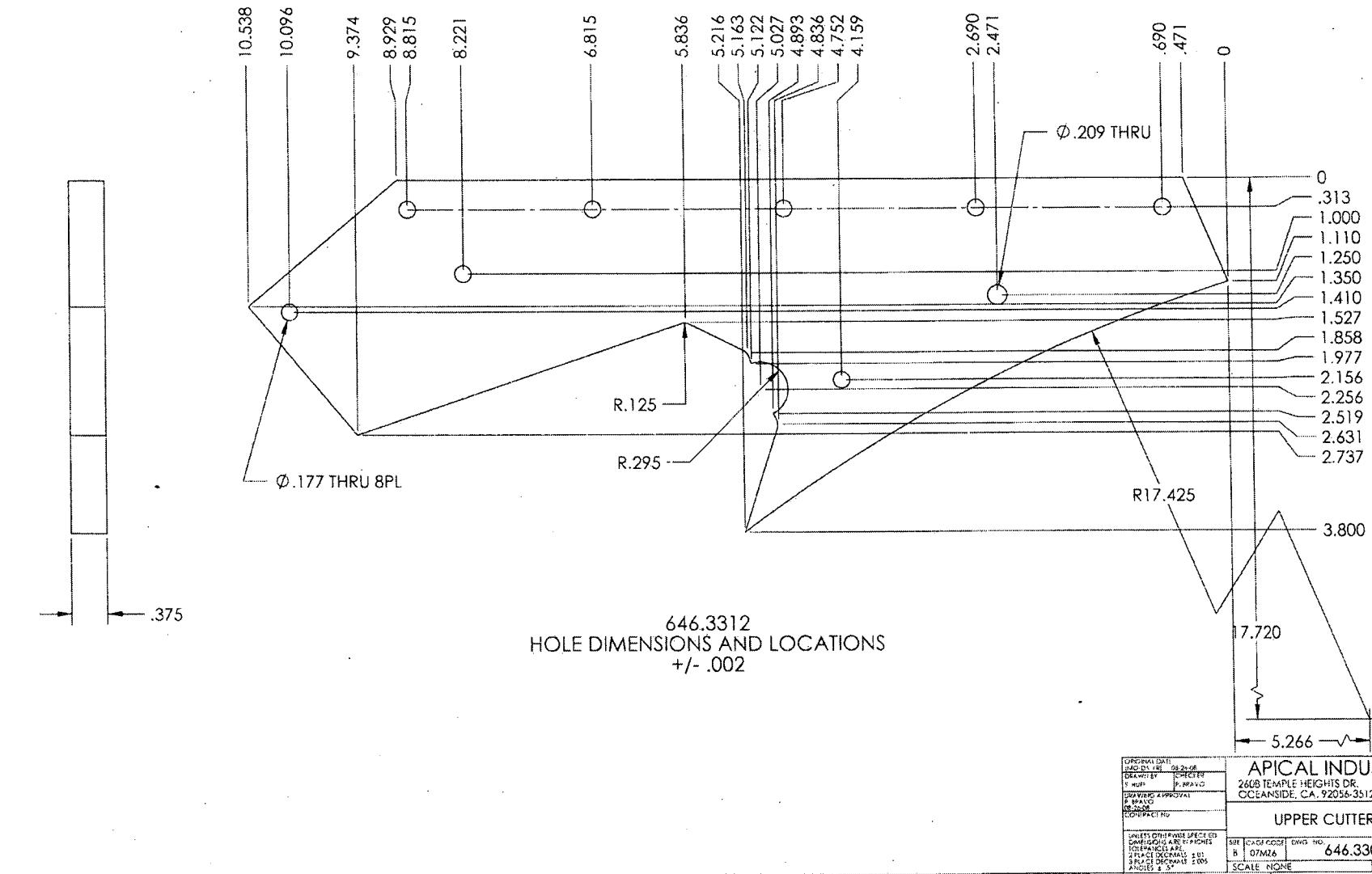
SECTION B-B

SECTION A-A

ORIGINATOR DATA MATERIAL: P1 06-24-08	APICAL INDUSTRIES 2600 TEMPLE HEIGHTS DR. OCEANSIDE CA 92054-3512 (760)724-5300
DEPARTMENT: DESIGNER NAME: J. M. NO	DESIGN APPROVAL
CONTRACTORS	
UNLESS OTHERWISE SPECIFIED DRAWINGS ARE IN INCHES TOLERANCES ARE SURFACE FINISHES 100 ANGLE: ± 5°	SCALE: 1:100
FILE: CAD/COREL DWG. NO: 646.3300	REC: N/C
9 07M16	1 SHEET 3 OF 6

1 2 3 4 5 6 7 8
106094
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APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
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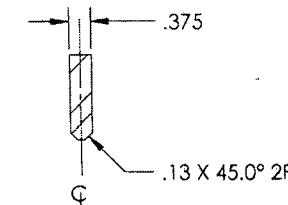
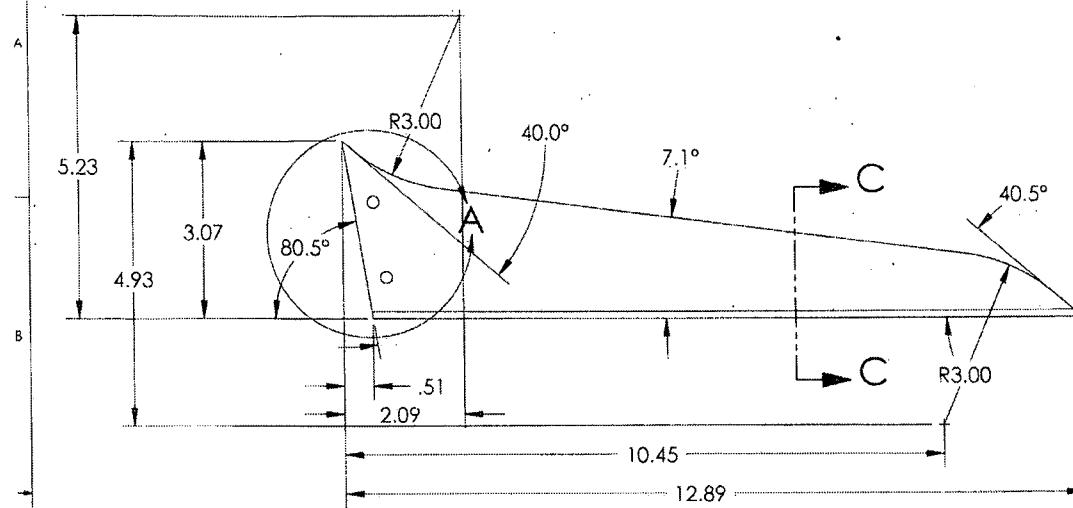
REV	DESCRIPTION	DATE APPROVED



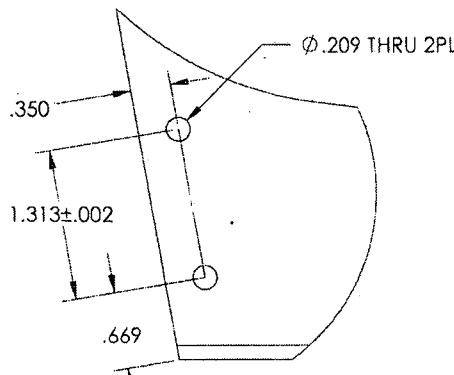
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REV	DESCRIPTION	DATE	DRAWN BY

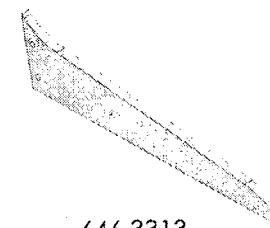
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SECTION C-C



DETAIL A

C
D

CHIEF ING. DATE JUN 12 1992 DR 2025 DRAWN BY: <input checked="" type="checkbox"/> BRAVO S.H.M.: <input checked="" type="checkbox"/> BRAVO DRAWING APPROVED: <input checked="" type="checkbox"/> BRAVO DRAFTED: <input checked="" type="checkbox"/> BRAVO COMPUTER: <input checked="" type="checkbox"/> BRAVO	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES ARE .005 UNLESS OTHERWISE SPECIFIED 3 PLACE DECIMALS ±.000 ANGLES ± 3°	REV: <input type="checkbox"/> NC CAGE CODE: DRG #2 B: D7376 SCALE: NONE SHEET: 3 OF 1

UPPER CUTTER ASSY

REV: <input type="checkbox"/> NC	CAGE CODE: DRG #2	DRG #2	REV: <input type="checkbox"/> NC
	B: D7376	646.3300	

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3 THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV	DESCRIPTION	DATE	APPROVED

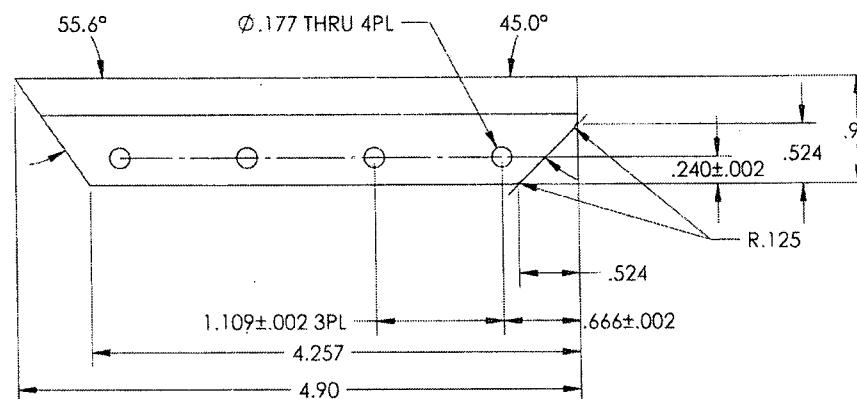
106094

A

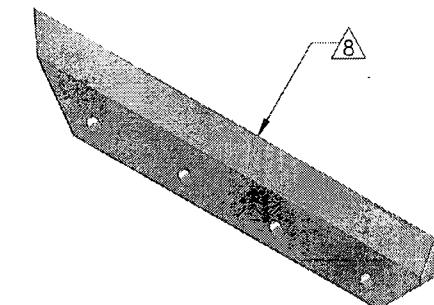
B

C

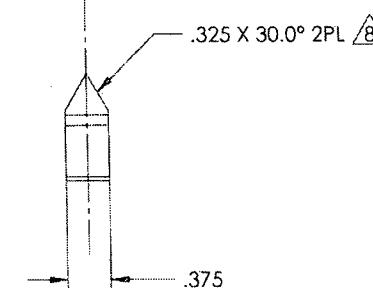
D



646.3314



C



1000000000	0000000000	APICAL INDUSTRIES
1000000000	0000000000	2608 TEMPLE HEIGHTS DR.
1000000000	0000000000	OCEANSIDE, CA. 92056-3512 (760)724-5300
1000000000	0000000000	UPPER CUTTER ASSY
1000000000	0000000000	REV: CAGE CODE: Dwg No: 646.3300
1000000000	0000000000	107M26 646.3300
1000000000	0000000000	SCALE: NONE
1000000000	0000000000	Sheet: 6 of 6

UNLESS OTHERWISE SPECIFIED
DRAWINGS IN INCHES
TOLERANCES .010
+ .002 DECREASING TO .005
.002 DECREASING TO .001

1000000000

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REVENUE		STATE	APPROVED
PER	DESCRIPTION		

A

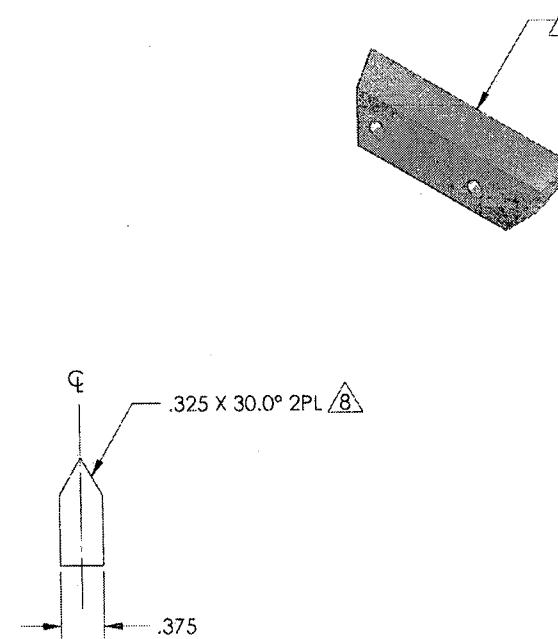
88

6

1

Technical drawing of a rectangular component with two circular holes and a slot. The top edge has a slot with a width of $.250 \pm .002$ and a height of $.256 \pm .002$. The distance from the top edge to the bottom edge is $.94$. The distance between the centers of the two holes is 1.817 . The width of the component is 2.46 . A corner is chamfered with a radius of $.177$ and an angle of 55.6° .

646.3315

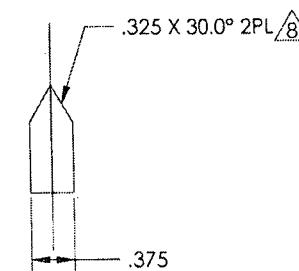
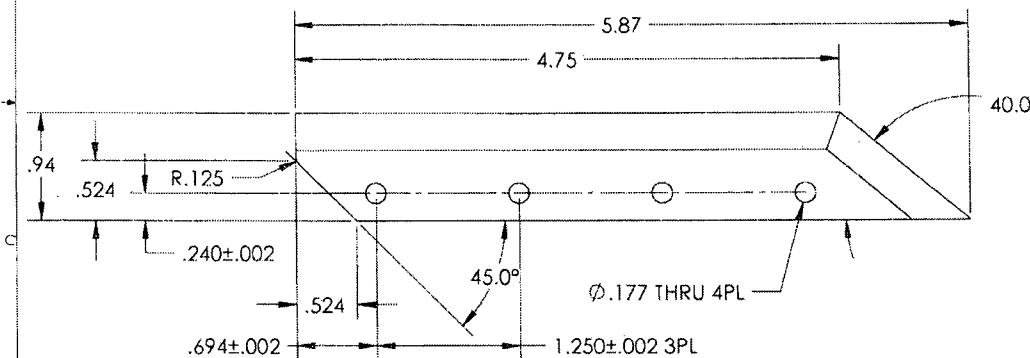
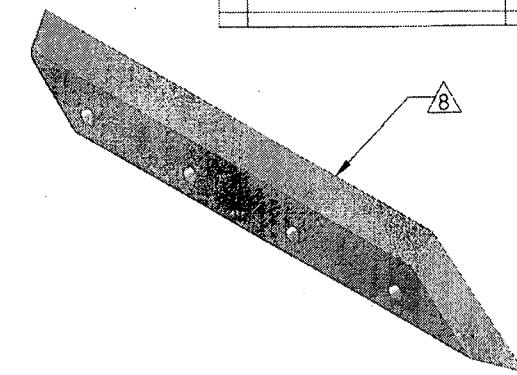


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REV	DESCRIPTION	DATE	APPROVED

106094



646.3316

DRAWN BY: [Signature]	APICAL INDUSTRIES
SP. BY: [Signature]	2408 TEMPLE HEIGHTS DR.
SUPERV: [Signature]	OCEANSIDE, CA. 92056-3512 (760)724-5300
GR. APPROV: [Signature]	
P. DRAWN: [Signature]	
DES. BY: [Signature]	
COM. BY: [Signature]	
NOTE: IF OTHERWISE SPECIFIED DRAWINGS ARE IN INCHES. TOLERANCES ARE INCHES UNLESS OTHERWISE SPECIFIED. MATERIAL: 1003 ANGLE: ± 5°	
CH/GE CODE: B	REV: N/C
DATE: 07/4/02	646.3300
SCALE: NONE	1 SHEET 8 OF 8

DART AEROSPACE LTD	Work Order:	101,094
Description: <u>UPPER GUIDE</u>	Part Number:	641e.3313
Inspection Dwg: 141,330b Rev: N/C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	<i>Onk</i>	Audited by:	<i>D. S.</i> ⁰⁸ ₉₋₈₉	Preliminary Approval:	
Date:	13/09/11	Date:	13/09/12	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62633

Date: 20-Sep-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via
Quantity	Description	
1 lot	Part: ASST 6 PCS 646.3313 5 PCS 647.9314 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Job: 20130585	Rev: Line:
Certificate of Conformance A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY DATE : <u>20/9/13</u> CERTIFIED SIGNATURE : <u>LM</u> RECEIVER SIGNATURE : _____		